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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/318,775 05/26/99 QUATE

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MM91/1117

EXAMINER

BEN, L

ART UNIT

PAPER NUMBER

2873

DATE MAILED:

11/17/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Office Action Summary**Application No.  
**09/318,775**

Applicant(s)

**QUATE ET AL**

Examiner

**LOHA BEN**

Group Art Unit

**2873**☒ Responsive to communication(s) filed on May 26, 1999☐ This action is **FINAL**.☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**☒ Claim(s) 1-36 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☒ Claim(s) 1-23 is/are allowed.☒ Claim(s) 24-36 is/are rejected.☐ Claim(s) \_\_\_\_\_ is/are objected to.☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.**Application Papers**☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.☐ The specification is objected to by the Examiner.☐ The oath or declaration is objected to by the Examiner.**Priority under 35 U.S.C. § 119**☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).**Attachment(s)**☒ Notice of References Cited, PTO-892☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2,3,4☐ Interview Summary, PTO-413☐ Notice of Draftsperson's Patent Drawing Review, PTO-948☐ Notice of Informal Patent Application, PTO-152  
**Loha Ben**  
**Primary Examiner**

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2873

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 24-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 24: line 3, the limitation recited is not connected to the rest of the limitations, either optically, or structurally. On line 4 of the claim, it is not clear where the light pattern is formed.

In claim 32: the recitation is functional in that there is no structure to support the function claimed.

In claim 33: line 2 of the claim calls for **deprotection** of reaction sites of a polymer array. However, the **protection** of the reaction sites has not been previously recited.

3. Claim 33 recites the limitation "said predetermined two dimensional light image" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

The remaining claims, depending upon rejected base claims 24, 32 and 33, inherit the indefiniteness thereof.

Art Unit: 2873

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 24-28, 31 and 32 are rejected under 35 U.S.C. 102(a) as being anticipated by Huibers.

Insofar as understood, claims 24-28, 31 and 32 read on Huibers. See columns 1 and 2, especially, column 1, lines 18-26, for formation of two dimensional light pattern, and column 2, lines 22-62, for GLV claimed in claim 28.

6. Claims 24-27, 31 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Conner et al.

As now worded, claims 24-27, 31 and 32 read on Conner et al. See column 1, lines 17-27, for formation of two dimensional light pattern.

***Allowable Subject Matter***

Claims 1-23 are allowed. The reason is based on the modulation of light direction with a spatial light modulator so as to generate a predetermined light pattern used for deprotecting selected portions of protected reaction sites.

Art Unit: 2873

***Minor Suggestion***

**In the Specification**

Page 11: line 8, "from" should be -- for --.

**In the Claims**

In claim 31: line 2, "illuminate" should be -- illuminating --; and line 4, "of"(first occurrence) should be deleted.

**In the Abstract**

Lines 5 and 13, "means" should be replaced with -- apparatus --, since the word "means" is not allowed in the abstract.

***Communication***

Any inquiry concerning this communication should be directed to Loha Ben at telephone number (703) 308-4820.



**Loha Ben  
Primary Examiner**

November 15, 2000